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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/890,490	90 07/31/2001		Alan Chin Leong Yeo	PHN 17,751	PHN 17,751 1700	
24737	7590	12/28/2005		EXAM	MINER	
PHILIPS II	TELLE	CTUAL PROPER	NGUYE	NGUYEN, DUC M		
P.O. BOX 30	001					
BRIARCLIF	BRIARCLIFF MANOR, NY 10510				PAPER NUMBER	
•		•		2685	-	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)					
	09/890,490	YEO ET AL.					
Office Action Summary	Examiner	Art Unit					
	Duc M. Nguyen	2685					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 13 O	<u>ctober 2005</u> .						
· <u> </u>	,—						
• • • • • • • • • • • • • • • • • • • •	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) Claim(s) 1-20 is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
7)	6) Claim(s) <u>1-20</u> is/are rejected.						
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r						
10) The drawing(s) filed on is/are: a) acce		Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
See the attached detailed Office action for a list	or the certified copies not receive						
Attachment(s)							
1) Notice of References Cited (PTO-892)	4) Interview Summary						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5)	ate Patent Application (PTO-152)					
Paper No(s)/Mail Date 6) Other:							

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### **DETAILED ACTION**

This action is in response to applicant's response filed on 10/13/05. Claims 1-20 are now pending in the present application. **This action is made final**.

## Claim Rejections - 35 USC ∋ 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-7, 9-11, 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Porambo et al (US Pat. Number 5,280,638).

Regarding claim **1, Porambo** discloses a method of tuning a receiver for a RF signal (see Abstract), the method comprising the steps of:

filtering an input signal (RF-in) to obtain a processed signal (see Figs 3),

determining a digital figure of merit (BER) from the processed signal (see Fig. 3 and col. 6, lines 14-18); and

fine-adjusting the center frequency of one or more filters in dependence on the digital figure of merit (see col. 5, lines 1-4 and col. 6, lines 25-33).

Regarding claim **3**, **Porambo** discloses at least one partial filtering step and optimizing the digital figure-of-merit as claimed (see col. 6, lines 25-33).

Regarding claim **4**, **Porambo** discloses at least two partial filtering steps with two control signals as claimed (see col. 6, lines 25-33).

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Regarding claim **5**, it is clear that the circuitry of filter in **Porambo** would inherently be factory pre-aligned as part of the quality control process in order to detect defected components.

Regarding claim **6**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Porambo** discloses a decoder (an inherent component of the microprocessor) as claimed (see Fig. 3 and col. 6, lines 14-18).

Regarding claims **7**, **9-11**, **13-15**, **17**, the claims are rejected for the same reason as set forth in claim 1 above. In addition, **Porambo** discloses

- one or more RF filters as claimed;
- a PLL (24) and D/A converters (60, 61) with control signals as claimed (see Fig. 3 and col. 6, lines 25-33).
- An input filter (36) and a double tuned band filter (38) as claimed (see Fig. 3).
- A pre-amp (37) and a mixer (40) as claimed (see Fig. 3).

Regarding claim **16, 18**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Porambo** discloses adjusting filters occur sequentially as claimed (see col. 6, lines 25-33).

Regarding claim **19**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, it is clear that **Porambo** would disclose adjusting filters independently and occur sequentially as claimed (see col. 6, lines 25-46).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims **2**, **8**, **12**, **20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Porambo** in view of **Liebetreu et al** (US Pat. Number **5**,**949**,**832**).

Regarding claims **2**, **12**, **20**, **Porambo** would disclose all the claimed limitations, see claims 1, 6, 9, 13 above, except for the BER is used as a digital figure-of-merit. However, it is noted that using BER or other signal quality indicators as a digital figure-of-merit would have been obvious to one skilled in the art as disclosed by **Liebetreu** (see Abstract, and col. 5, lines 34-37). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the above teaching of Liebetreu to modify Porambo, for incorporating such BER as a digital figure-of-merit for tuning filters as well, for further improving the performance of the tuner.

Regarding claim **8**, the claim is rejected for the same reason as set forth in claim 2 above. In addition, it is clear that for a video or TV digital signal, the signal would obviously comprise an MPEG encoded signal as claimed, for saving signal bandwidths achieved by MPEG compression ratio.

#### Response to Arguments

4. Applicant's arguments with respect to claims 1-20 have been considered but are most in view of the new ground(s) of rejection.

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#### Conclusion

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US005438699A to **Coveley**,

US004399559A to Theriault,

US005678211A to Badgerer,

US005179302A to Wagner,

US005721756A to Liebetreu et al.

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# 7. Any response to this final action should be mailed to:

Box A.F.

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or draft communications).

Hand-delivered responses should be brought to Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893, Monday-Thursday (9:00 AM - 5:00 PM).

Or to Edward Urban (Supervisor) whose telephone number is (571) 272-7899.

Duc M. Nguyen, P.E.

Dec 12, 2005